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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/805,085	03/19/2004	Isaac B. Horton III	1300-023	7712
7590		06/12/2007		
Isaac B. Horton RemoteLight, Inc. 8824 Stage Ford Road Raleigh, NC 27615				
			EXAMINER	
			JASTRZAB, KRISANNE MARIE	
			ART UNIT	PAPER NUMBER
			1744	
			MAIL DATE	DELIVERY MODE
			06/12/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/805,085

**Applicant(s)**

HORTON, ISAAC B.

**Examiner**

Krisanne Jastrzab

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-66 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-66 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 3/04.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Specification***

The disclosure is objected to because of the following informalities: the continuing information on page 1 should be updated to reflect the current status of the parent application.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 6, 20-22, 28-29, 35, 40-42, 44, 51, 58 and 64-65 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claim 6, this claim is found to be vague and indefinite because of the recitation of "UVV" included there. Clarification is required.

With respect to claims 20, 40 and 64, these claims are found to be vague and indefinite because they improperly recite a broad optic item and a more specific one of the same, within the same Markush grouping (i.e. "reflectors" and "off-axis reflectors" and "cascading reflectors").

With respect to claims 21-22, these claims are found to be improper and vague and indefinite because it is unclear as to what structural limitation would be required by the language "enhanced two-dimensional design" or "enhanced three-dimensional design" and the claim "to improve" is improper.

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With respect to claims 28 and 29, "the fiber filter" lacks proper antecedent basis.

With respect to claim 41, this claim is found to be vague and indefinite because it fails to properly further limit the claim from which it depends. The claim merely recites method phraseology that fails to further limit the structure of the apparatus claim from which it depends.

With respect to claims 35 and 58, some of the formulas recited are improperly formatted. Correction is required.

With respect to claim 42, this claim is found to be vague and indefinite because it fails to properly further limit the claim from which it depends. The claim merely recites method phraseology that fails to further limit the structure of the apparatus claim from which it depends, and it is unclear as to what structure would function to "protect". Clarification is required.

With respect to claim 44, this claim is found to be vague and indefinite because the gas flow is not positively provided thus the limitation of "outside" is unclear with respect to claimed structural elements.

With respect to claim 51, this claim fails to properly further limit the apparatus claim from which it depends because it merely recites method phraseology.

With respect to claim 65, this claim is found to be vague and indefinite and fails to properly further limit the apparatus claim from which it depends because the type of effluent production fails to further limit the structure claimed.

***Claim Rejections - 35 USC § 103***

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goswami U.S. patent No. 5,835,840 in view of Saalman et al., DE 2,146,504 (Abs).

Goswami teaches substantially the invention as claimed, namely a UV light source means, a gas purifier having particle arrestors and photocatalytic surfaces coated with catalysts such as titanium dioxide, and control means, wherein the UV source is configured to irradiate a zone of the gas purifier to sterilize the air flowing therethrough. The photocatalyst can be provided on a woven fiber filter and the purifier has reflective surfaces therein. Goswami is silent as to whether the UV light source provides focused light or not. See column 3, line 65 through column 4, lines 40, and column 5, lines 5-15.

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Saalmann et al., teach the known and expected provision of UV light to for gas purification in a configuration which focuses the light for delivery and contact with gas to be purified. See the English abstract.

It would have been obvious to one of ordinary skill in the art to employ the UV source of Saalmann et al., for the UV source of Goswami because it would provide focused light for gas treatment having greater accuracy and and efficiency in sterilization.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-66 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-74 of U.S. Patent No. 6,730,265.

Although the conflicting claims are not identical, they are not patentably distinct from

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each other because they are of the same inventive concept of focused UV light for gas purification.

Claims 1-66 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-74 of U.S. Patent No. 6,737,020.

Although the conflicting claims are not identical, they are not patentably distinct from each other because they are of the same inventive concept of focused UV light for gas purification.

Claims 1-66 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-31 of U.S. Patent No. 6,447,720.

Although the conflicting claims are not identical, they are not patentably distinct from each other because they are of the same inventive concept of focused UV light for gas purification.

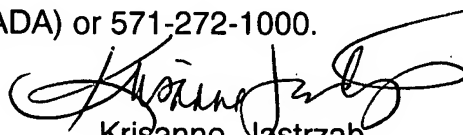
### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Krisanne Jastrzab whose telephone number is 571-272-1279. The examiner can normally be reached on Mon.-Thurs. 6:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on 571-272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Krisanne Jastrzab  
Primary Examiner  
Art Unit 1744

June 8, 2007